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CATALOGUE

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# C A T A L O G U E

OF

## THE LIBRARY

OF

THE INSTITUTION OF CIVIL ENGINEERS,

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*SECOND EDITION.*

CORRECTED TO DECEMBER 31, 1865.

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LONDON :

PRINTED BY WILLIAM CLOWES AND SONS, STAMFORD STREET. .  
1866.

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*Grafton*  
9-9-30  
*Travellers*

## PREFACE TO THE SECOND EDITION.

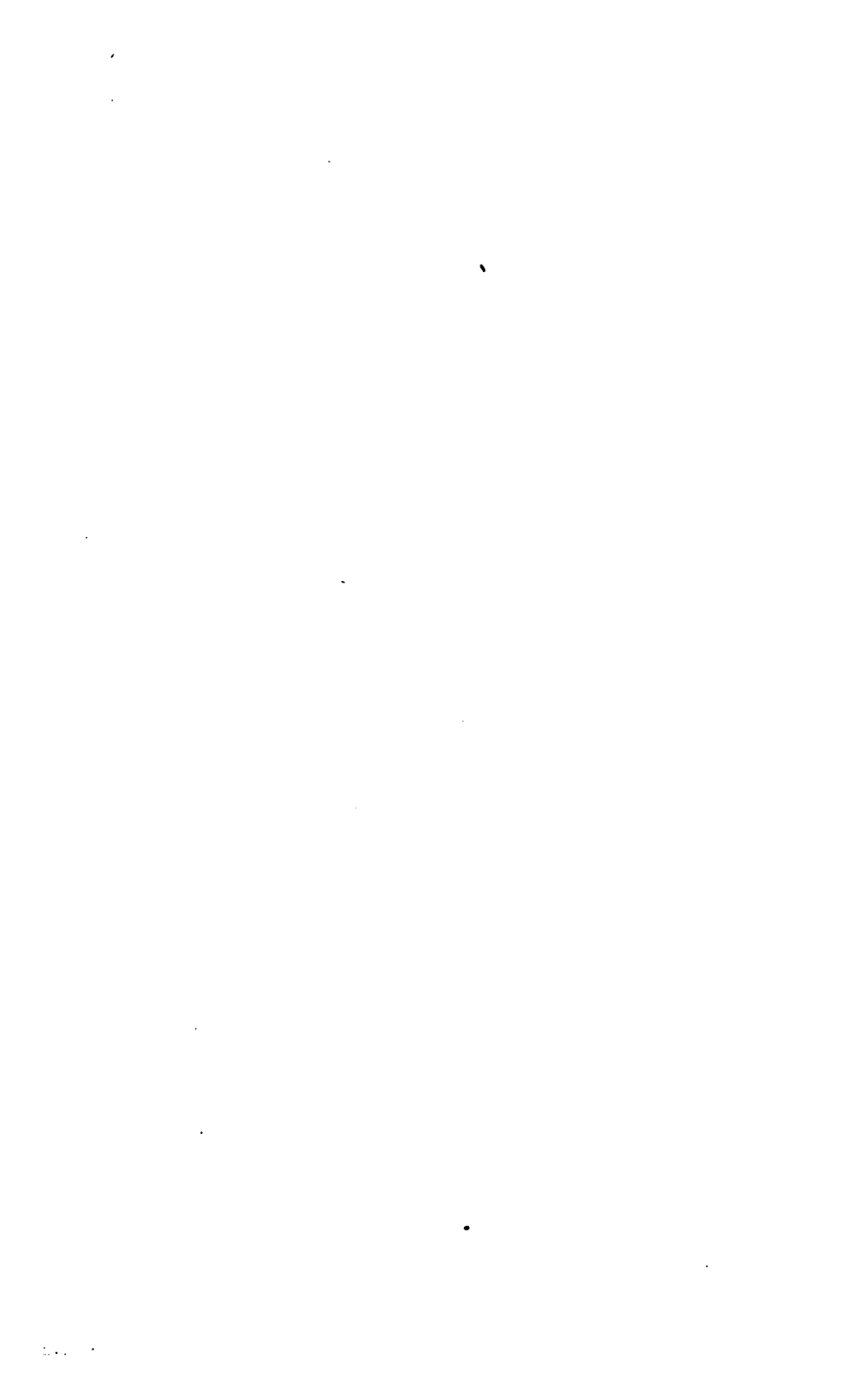
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THIS edition of the Catalogue of the Library has been prepared by Mr. H. S. Eaton, under the superintendence of the Secretary, on precisely the same system as the former one, as the plan first adopted has been found to answer every requirement; and the remarks on the arrangement contained in the preface to the previous edition apply equally to the present.

During the fifteen years which have elapsed since the former publication, the number of volumes in the Library has been steadily increasing, and now exceeds five thousand five hundred; while the pamphlets, which perhaps more than larger works are calculated to convey the impressions of the age, number upwards of three thousand two hundred, contained in eight folio, fifty-one quarto, and one hundred and forty-nine octavo volumes of tracts.

There still remain deficiencies which it will become more and more difficult to supply as years pass away, particularly where volumes of a series are wanting. These are noted in the Catalogue, and the Council hope that their efforts to supply the missing volumes and to extend the Library may be zealously seconded by the general body of the Members and Associates of the Institution, so as to make the Library as perfect as possible, and to render it instrumental in affording complete information on engineering subjects from the earliest times to the present day.

*The Institution of Civil Engineers,  
25, Great George Street, Westminster, S.W.  
March 24, 1866.*





## PREFACE TO THE FIRST EDITION.

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IN the year 1841 the first part of a Catalogue of the Library was issued containing the titles of the books arranged alphabetically under the names of the Authors, and a second part, with the subjects also arranged alphabetically, was to have been published subsequently; want of punctuality on the part of the person to whom the duty of editing was entrusted, prevented the accomplishment of this intention, and it was ultimately decided that a more complete system should be adopted.

Mr. C. Manby, the Secretary, was then instructed to report to the Council; and after devoting much time and attention to the subject, and consulting the best authorities, he advised that an entirely new Catalogue should be drawn up, and that it should contain, in alphabetical order, the names of the Authors, with the complete title of each work, and the principal contents, with cross references to the authors of works on those particular subjects most analogous to the pursuits of Engineers.

This suggestion was adopted, and considerable progress was made in the preparation of the slips, two principal entries being made for each work, and as many cross references as were judged necessary. The increase of the Institution induced, however, such an augmentation of the labours of the Secretary, that it was found impossible to devote the necessary time to this work, and as a Catalogue was imperatively demanded, the Council instructed the Secretary, in the summer of 1850,

to obtain assistance for the completion of the work, on the understanding that it should be executed under his superintendence. Accordingly Mr. James Forrest was induced to undertake the labour, and has devoted himself to it almost incessantly, examining and collating the original slips, and extending the cross references, including all the books and pamphlets presented to the Institution up to the thirty-first of December, 1850.

The Catalogue is now formed on a simple alphabetical system, giving under the Author's name an entire transcript of the title-page of each work and tract, the subject entries being made as brief as possible, and the cross references being so multiplied, that scarcely any subject can escape unnoticed. This could not, of course, extend to Encyclopædias, Transactions of Societies, current Periodicals, or to the Parliamentary Reports; for the latter, however, entries are made, similar to the indices to the edition of Parliamentary Papers published in 1803. The Transactions and Minutes of Proceedings of Societies are all arranged under the word "Transactions" as the principal entry, the name of the Society or Institution being taken for the sub-entry.

Bridges, Canals, Railways, Roads, Docks, Navigation, Ports, Rivers, and Water, have also been subject to a separate sub-arrangement and classification. Thus, under "Bridges," the description of bridge, whether iron, stone, or timber, has been taken as the first sub-entry, then the geographical distinction of the country in which the bridge is situated, and then the name of the bridge itself.

Under "Canals," the name of the country is the first sub-entry, and then that of the canal itself. Under "Railways" and "Roads," matters appertaining to their construction and management are first given, followed by a geographical arrangement similar to that adopted for canals. For Docks, Navigation, Ports, Rivers, and Water, this minute subdivision is unnecessary, on account of the comparatively limited space occupied by these entries; but in every case the rule of alphabetical sub-arrangement has been closely followed.

The number of volumes in the Library is rather above three thousand, and the number of tracts exceeds fifteen hundred. These latter are bound up into thirty-eight quarto volumes, and ninety octavo volumes, each set being consecutively numbered.

A Catalogue Raisonné, embracing all the technicalities in the practice of the profession, was that which would have been most useful, but it was a work of too great labour to be undertaken for a constantly increasing library,—the present form has therefore been adopted. In the first edition many errors and omissions will doubtless be discovered; but if they are immediately pointed out to the Secretary, with suggestions as to useful additions, and sub-entries, subsequent editions may be rendered more perfect and complete. Of clerical errors it is hoped there will be but few; great attention having been paid to collating the titles, and to correcting the proof-sheets.

It has been alleged, that in the absence of a Catalogue, those who would have contributed to increase the Library did not know what books would be acceptable. The Council venture to hope, that the circulation of this Catalogue among the Members of the Institution, will not only remind all those who are Authors, of the absence of their treatises, reports and pamphlets, but will induce the presentation of those standard scientific and technical works, without which no library can be considered complete.

In future a list will be kept of the books most needed by the Institution, and it is recommended, that those Members intending to contribute to the Library will either apply to the Secretary for the name of some of these works, or will adopt the plan mentioned in the last Annual Report, of sending a sum of money, to be expended as may be considered most advantageous by the Library Committee.

The literature of engineering, in the English language, has been accused of being, and is perhaps, defective; and it was thought, a few years since, that gentlemen actively engaged in the practice of the profession, and who had the best opportunity for producing such works, were averse to writing treatises, although it would have been much more correct to have assigned this rather to their absorbing engagements, than to any indifference to the progress of science. They have, however, written elaborate Reports, on various professional topics, and they may with great advantage follow the example of the late Mr. R. Stevenson, of Edinburgh, and present collections of their printed Reports to the Institution. It is only necessary to refer to Smeaton's Reports, and to the high value still attached to them, as a text-book for Engineers, to

show the importance of such documents, and to demonstrate, that they would form the best collection of data, to be eventually used as the basis and groundwork of more elaborate and complete treatises. The aversion to book-making, if it ever existed, has been gradually giving way, and the most eminent men in the profession are now enriching the literature of engineering with the results of their varied experience; and as the Library of the Institution ought to represent the actual state of technical literature, the Council confidently trust that the wants exhibited by this edition of the Catalogue will be speedily supplied by the liberality of the Members and their Friends.

*The Institution of Civil Engineers,  
25, Great George Street, Westminster, S.W.  
December 31, 1850.*

THE  
INSTITUTION  
OF  
CIVIL ENGINEERS.

1866.

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CATALOGUE OF THE LIBRARY.

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- A. B. Observations relative to a bill intended to have been presented to Parliament this sessions for the better draining the Middle and South Bedford Levels, and the improvement of navigation. Tract. 8vo. *No place, 1778*
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- ABACUS. *Vide OLIVIER.*
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- ABBATT, R. A treatise on the calculus of variations. 12mo. Plate. *Lond. 1836*
- ABBEY, Westminster. *Vide WARE.*
- ABBOTT, G. Jun. An essay on the mines of England, their importance as a source of national wealth, &c. 8vo. (*Printed for private circulation only.*) *Lond. 1833*
- Observations on the proper selection and administration of the metalliferous mineral royalties and properties of this country. Tract. 8vo. vol. 78. *Lond. no date.*
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- ABEL, C. D. Rudimentary and elementary principles of the construction and on the working of machinery. 8vo. with 4to. atlas of plates. *Lond. 1860*
- The action of the patent laws in promoting invention. Tract. 8vo. vol. 139. *Lond. 1864*
- F. A. *Vide WHEATSTONE.*
- ✓ABERCROMBIE, C. Report respecting a new line of road from Hamilton to Elvanfoot. Tract. 4to. vol. 4. Map. *Glasgow, 1813*
- ABERDEEN Mechanics' Institution Library. *Vide CATALOGUE.*
- ABERNETHY, J. Remarks on certain portions of the supplementary report of the Royal Commission on harbours of refuge. Tract. Folio. vol. 7. Plates. *Lond. 1859*
- ABOLITION of statute, or forced labour in Sind. *Vide INDIAN GOVERNMENT.*
- ABURY and Stonehenge. *Vide RICKMAN.*

- ACADÉMIE DES SCIENCES. Comptes-rendus hebdomadaires des séances.  
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- IMPÉRIALE DES SCIENCES DE ST. PETERSBOURG, Mémoires de, vol. x.;  
avec l'histoire de l'académie pour les années 1821-22. 4to. Plate. *St. Petersburg, 1826*
- ROYALE DES SCIENCES DE PARIS, Analyse des travaux de l'Académie,  
pendant l'année 1819; partie mathématique; et pendant l'année 1828; parties physique  
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*Paris, no dates*
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- Militia sketch maps. 3 folding in 8vo. *Lond. 1855*
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Service Institution, Friday, May 11th, 1860. Tract 8vo. vol. 128. Map. *Lond. no date*
- The lines of London: defences by works and manœuvre in the field. With  
an appendix. Tract. 8vo. vol. 132. Map. *No place or date*  
(Excerpt Journal of the Royal United Service Institution, vol. 6.)
- The militia of the United Kingdom; with suggestions for the permanent  
organisation of the force. Tract 8vo. vol. 128. Map. *Lond. no date*
- The national defences and organisation of the militia of the United  
Kingdom. Originally published in a paper contributed to the Cambridge essays in 1858.  
Tract 8vo. vol. 128. *Lond. no date*
- The organisation and duties of the militia of the United Kingdom,  
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- ADAM, R.** Ruins of the palace of the Emperor Diocletian, at Spalatro in Dalmatia. Folio. Plates. *Lond.* 1764
- and J. The works in architecture of; containing the seat of the Duke of Northumberland, at Sion; the villa of Earl Mansfield, at Kenwood; the seat of the Earl of Bute, at Luton Park; public and private buildings; designs for the King and Queen, and the Princess Dowager of Wales; the house of the Earl of Derby, in Grosvenor-square; the house of Sir W. W. Wynn, Bart., in St. James's-square; and the house of the Earl of Shelburne, in Berkeley-square. Two vols. bound in one. French and English. Folio. Plates. *Lond.* 1778-9
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- , G. Geometrical and graphical essays, containing a general description of the mathematical instruments used in geometry, civil and military surveying, levelling and perspective, &c. Corrected and enlarged by W. Jones. 8vo. 3rd edition. Plates. *Lond.* 1803
- , J. The elements of the ellipse, together with the radii of curvature, &c. relating to that curve; and of centripetal and centrifugal forces in elliptical orbits; to which is added the first of Dr. M. Stewart's tracts. Tract. 8vo. vol. 30. Plates and cuts. *Lond.* 1818
- ✓ —, W. B. Road progress; or, amalgamation of railways and highways for agricultural improvement and steam farming, in Great Britain and the Colonies. Also practical economy in fixed plant and rolling stock, for passenger and goods trains. Tract. 8vo. Vol. 117. Plates. *Lond.* 1850
- W. G. On the application of screw blades as floats for paddle-wheels. Tract. 8vo. *No place or date*  
(Excerpt Phil. Mag. for May, 1865.)
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(Excerpt Phil. Mag. for April, 1865.)
- ADAM'S PEAK, Ceylon.** *Vide* DAVY.
- ADCOCK, H.** A letter to the mine proprietors of Great Britain and Ireland, on his spray pump. Tract. 8vo. vol. 78. *Birmingham,* 1846
- ADDRESS of the Royal College of Chemistry to agriculturists.** Tract. 8vo. vol. 61. *Lond.* no date
- ADELUNG, J. C.** *Vide* KÜTTNER.
- ADIE, A. J.** On the expansion of different kinds of stone from an increase of temperature, with a description of the pyrometer used in making the experiments. Tract. 4to. vol. 38. Cuts. *Edinb.* 1835  
(Excerpt Trans. Royal Society of Edinb. vol. 13.)
- ADLEY, C. C.** Anglo-Indian telegraphs, or communication with London in six hours. Tract. 8vo. vol. 127. Map. *Calcutta,* 1854
- The port of Calcutta: with special reference to the late cyclone, and the remedial measures to be adopted. Tract. 8vo. Plates. *Lond.* 1864
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AGNEW, H. C. On the evidence of the practical application of the quadrature of the circle in the configuration of the great Pyramids of Gizeh. 4to. Plates. *Lond.* 1838

AGRICOLA, G. B. De re metallica, libri, 12; accesserunt, de animantibus subterraneis, lib. 1; de ortu et causis subterraneorum, lib. 5; de natura eorum quæ effluunt ex terrâ, lib. 4; de natura fossilium, lib. 10; de veteribus et novis metallis, lib. 2; Bermannus sive de re metallica, dialogus, lib. 1. Folio. Cuts. *Basilea*, 1657

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— Magazine, the, and Plough, for May, 1850. Tract. 8vo. vol. 88. Cuts.

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AGRICULTURE. *Vide* ANNALS OF PHILOSOPHY, BRIDGEMAN, EENENS, ELLERMAN, INSTITUTE, JOURNAL OF STEAM TRANSPORT AND HUSBANDRY, LOVELACE, PHILOSOPHICAL MAGAZINE, REPERTORY OF ARTS, RETROSPECT, THOMPSON, and TRANSACTIONS.

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AIKIN, A. Illustrations of arts and manufactures; being a selection from a series of papers read before the Society for the encouragement of Arts, Manufactures, and Commerce. 8vo. Cuts. *Lond.* 1841

— Observations on the valleys and watercourses of Shropshire, and of parts of the adjacent counties. Tract. 4to. vol. 12. *Lond.* 1818

(Excerpt Trans. of the Geological Society, vol. 5.)

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— engines. *Vide* LAWRIE, PARSEY, and REDTENBACHER.

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—, hot, movement of. *Vide* PÉCLET.

—, movement of, in tubes. *Vide* CHOWNE.



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- , resistance of, to bodies in motion. *Vide* HUTTON.
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- — Appendix to the, 1837, containing logarithms of sines and cosines to time, for every ten seconds through the twenty-four hours, and tables for converting sidereal time into mean solar time. 4to. *Lond.* 1838
- — 1842. Catalogue of the places of 1,439 stars, referred to the 1st of January 1840, deduced from the observations made at the Royal Observatory, Greenwich, from 1836, January 1, to 1841, December 31. 4to. *Lond.* 1843
- — 1847. Catalogue of 2,156 stars, formed from the observations made during twelve years, from 1836-47, at the Royal Observatory, Greenwich. 4to. *Lond.* 1849
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- First analysis of one hundred and seventy-seven magnetic storms, registered by the magnetic instruments in the Royal Observatory, Greenwich, from 1841 to 1857. Tract. 4to. vol. 45. *No place or date*  
(Excerpt Phil. Trans. for 1863.)
- Lecture on the pendulum experiments at Harton Pit, delivered in the Central Hall, South Shields, October 24th, 1854. Together with a letter containing the results of the experiments. Tract. 8vo. vol. 103. Plates. *Lond.* 1855
- Magnetical and Meteorological observations, made at the Royal Observatory, Greenwich, in the years 1840 to 1847. 7 vols. 4to. Plates. *Lond.* 1843-49
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(Excerpt Trans. Cambridge Phil. Society, vol. 7.)
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(Excerpt Trans. Cambridge Phil. Society.)
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(Excerpt Phil. Trans. for 1862.)
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(Excerpt Phil. Mag. for July, 1868.)

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 — — Severn at Cressage. *Session, 1799*  
 — — at Madeley Wood. *Session, 1776*  
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 — — Richmond, act for. *Session, 1773*  
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 — — CANAL, Apedale to Newcastle-under-Lyme, act for. *Session, 1775*  
 — — — Ashby-de-la-Zouch, act for. *May 9, 1794*  
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 — — — Dearne and Dove, act for. *June 3, 1793*  
 — — — Derby, act for. *May 7, 1793*  
 — — — Edinburgh and Glasgow union, act and amended act. *June 27, 1817, and May 19, 1819*  
 — — — Ellesmere, act, and amended and extension acts. *April 30, 1793; April 26, 1796; June 20, 1801; April 15, 1802; June 29, 1804; and April 6, 1810*  
 — — — — and Chester, act for uniting the. *May 21, 1813*

- PARLIAMENTARY Papers. CANAL, Forth and Clyde, and the Monkland, act for uniting the. *Session, 1790.*
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- — — Grand Junction, act and amended acts. *April 30, 1793; March 28, 1794; March 5, 1795; June 2, 1795; and June 20, 1801; March 24, 1803; June 27, 1805; and March 17, 1818*
- — — Grand Surrey, additional acts, and acts for extension of. *Aug. 8, 1807; June 3, 1808; June 15, 1811; June 9, 1812; and July 9, 1812*
- — — Grand Union, act for. *May 24, 1810*
- — — Grand Western, act and amended acts. *March 24, 1796; June 15, 1811; and March 20, 1812*
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- — — Newport Pagnell, act for. *June 17, 1814*
- — — Nutbrook, act for. *June 3, 1793*
- — — Oakham, act for. *May 7, 1793*
- — — Peak Forest, act for, and act for discharging debts. *March 28, 1794, and March 18, 1805*
- — — Pocklington, act for. *May 25, 1815*
- — — Pontnewynydd, act for. *Session, 1792*
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— — —	Trent and Mersey, act and amended acts.	Sessions, 1766-70-75-83
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— — —	Wisbech, act for.	May 9, 1794
— — —	Wyrley and Essington, act for, and act for extension.	Session, 1792; and March 28, 1794
— — —	and railway, Penclawdd, act for.	May 21, 1811
— — —	and tramroad, Kidwelly and Llanelly, act for.	June 20, 1812
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— — —	Aberdeenshire, act, amended act, and act for raising money.	April 26, 1796; March 24, 1801; and March 13, 1809
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— — —	Basingstoke, act and amended acts.	Sessions, 1778-93 and 1819
— — —	Birmingham, act and amended acts.	Session, 1768; April, 17, 1794; July, 3, 1806; May 21, 1811; May, 12, 1815; and March 17, 1818
— — —	— and Fazeley, act for.	Session, 1827
— — —	Coombe Hill, act for.	Session, 1792
— — —	Borrowstowness, amended act.	Session, 1783
— — —	Caistor, act for.	June 3, 1794
— — —	Chester, amended act.	Session, 1777
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— — —	Dorset and Somerset, act for raising money.	July 4, 1803
— — —	Dudley, act, extension act, and act for raising money.	Session, 1776-85; June 17, 1793; and Dec. 23, 1796
— — —	Flint, act for.	Session, 1778
— — —	Glamorganshire, act and amended act.	Session, 1790; and April 26, 1796
— — —	Grantham, act and amended act.	April 30, 1793; and March 3, 1797
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— — —	Kennet and Avon, act and amended acts.	April 17, 1794; March 24, 1796; May 7, 1798; May 21, 1801; June 27, 1805; and June 3, 1809
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— — —	Nottingham, act for.	Session, 1792
— — —	Oxford, act and amended acts.	Sessions, 1769, 1808, and 1824
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— — —	Shropshire, act for.	Session, 1788
— — —	Somersetshire coal, amended act.	April 30, 1802

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- — — Swansea, act for. *May 23, 1794*
- — — Thames and Severn, acts for raising money, and amended acts. *Session, 1791; March 7, 1796; May 27, 1809; and July 2, 1813*
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- — — — and Braunston act and amended act. *March 28, 1794; and May 14, 1796*
- — — — and Napton, amended act. *May 20, 1809*
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- PARLIAMENTARY PAPERS. FERRY across the Thames at Woolwich, act for. *June 26, 181*
- — — bill, Isle of Wight. Report by J. G. C. Curtis. *March 31, 185*
- — — FINANCE; debt and taxes, collection and expenditure of the public revenue and auditing public accounts. Vols. 12 and 13. *March 31, and July 17, 179*
- — — revenue, debt, and expenditure on civil and military establishment for 1797. Vols. 12 and 13. *June 26, 179*
- — — FINE ARTS Commission, report of *Lond. 184*
- — — FISHERIES, British. Vol. 10. *May 11, 1785, to June 8, 178*
- — — Herring. Vol. 10. *April 5, 1798, to June 30, 180*
- — — Irish, first and second report of the Commissioners. *Dublin, 183*
- — — Pilchard. Vol. 10. *April 16, 1785; and May 5, 178*
- — — FLOUR from wheat, methods practised in the making of. Vol. 9. *June 14, 177*
- — — FORFEITED estates in Scotland, act for applying balances derived from. *July 23, 180*
- — — — of the Earl of Derwentwater. Vol. 1. *March 22, 173*
- — — GAOLS, reports respecting. *Feb. 183*
- — — GAS company for Rochester, Chatham, and Strood, bill for a. *Session, 182*
- — — GAUGE Commissioners' report, minutes of evidence, and Appendix. *Session, 184*
- — — HARBOUR, Aberdeen, amended act, and act for improvement of. *Session, 1810; and May 14, 182*
- — — Ardrossan, act for. *Session, 180*
- — — Belfast, history of the, compiled by the harbour department of the admiralty. Folio, plans, and map. *Lond. 185*
- — — Boston, act for improving. *May 20, 181*
- — — Bridlington, minutes of evidence taken before the Lords' committee. *June 27 to June 29, 183*
- — — Dover, reports on *Lond. 184*
- — — Dunmore, estimate and act for improving. *May 25, 1814; and Session, 181*
- — — Holyhead, first report on, with Mr. Rennie's estimate. Tract. 4to. vol. 4. Map. *Lond. 181*
- — — — letter from Sir L. Parry, in 1844. *June 11, 184*
- — — &c.; correspondence, minutes, &c., relative to the carrying His Majesty's mails, &c. *May 3, 184*
- — — Treasury minute relative to the contribution of the Chester and Holyhead Railway Company towards constructing. *May 18, 184*
- — — Commissioners' report on. *May 31, 184*
- — — minutes of evidence taken before the Commissioners of, relative to Mr. Rendel's plan. *June 16, 184*
- — — report of the Select Committee on the bill for, and minutes of evidence. *June 23, 184*
- — — — act for the purchase of lands for. *July 22, 184*
- — — — and Port Dynllaen, reports on the comparative merits of. *Aug. 17, 184*
- — — — *Vide also PARLIAMENTARY PAPERS—LONDON AND DUBLIN COMMUNICATION.*
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- — — — ditto, with minutes of evidence and Appendices Nos. 1 to 5, containing reports of Messrs. Rennie and Huddart, &c. Tract. 4to. vol. 16. Plates. *Lond. 181*
- — — Maryport, bill for increased powers. *Session, 182*

- PARLIAMENTARY PAPERS.** HARBOUR, Ramsgate. Report of Captain Vetch, *May 31, 1853*  
**R. E.** Map. *Session, 1833.*  
 — Rye, bill for increased powers. *Feb. 25, 1757*  
 — — and Dover, improvement of. Vol. 2. *June 29, 1804.*  
 — Swansea, amended act. *Appendix.*  
 — and Docks, West Hartlepool, report on, by C. Curtis. *Session, 1850*  
**Plates.**  
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     *11 August, 1857; and 17 June, 1858*  
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July 8, 1820.
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Session, 1792; and July 9, 1800
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Session, 1791; and June 20, 1800
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- — — — report of J. G. C. Curtis, with Appendix. Plates and map.  
Session, 1848
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Dublin, 1837; Lond. 1838; and Dublin, 1839
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- — — Sleaford, act for. Session, 1792
- — — Stowmarket and Ipswich, further act for. Session, 1793
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- report on. *Aug. 1, 1836*

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(Maps wanting.)
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2 K



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*Lond.* 1834-
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- — Arun navigation, improvement act. *Session*, 17
- — Bann improvement act, and amended act. *July* 10, 1817; and *July* 4, 18
- — Bourn Eau navigation, improvement act. *Session*, 17
- — Cham navigation, amended act. *July* 21, 18
- — Clyde navigation, amended act. *May* 20, 18
- — navigation bill, minutes of evidence. Tract. Folio. vol. 8. *Lond.* 18
- — Dee navigation, proprietors of, and certain Lords of Manors, &c., for confirming an agreement between, *Session*, 17
- — Hull, &c., improvement, and amended acts. *July* 2, 1801; and *July* 7, 18
- — Itchin navigation, amended acts. *June* 2, 1795; *June* 26, 1802; and *July* 15, 18
- — Lark improvement, amended act. *July* 10, 18
- — Lee navigation improvement acts. *Sessions*, 1757-67 and 79; and *June* 27, 18
- — Trust Bill, minutes of evidence on. *June* 26, 18
- — Lune navigation, amended act. *Aug.* 1, 18
- — Nene, improvement act. *April* 17, 17
- — Papers in reference to the local inquiry held before J. G. Cockburn  
Curtis, *May* 15, 18
- — Ouse navigation, improvement acts. *Sessions*, 1790-91; and *June* 28, 18
- — Ribble navigation, improvement act. *July* 12, 18
- — Rother, improvement act. *Session*, 17
- — Severn, improvement act. *Session*, 17
- — Shannon floods, inquiry into the extent and causes of, held by J. F. Bateman, 1862. 8vo. *Dublin*, 18
- — Shannon, inundation enquiry, report by Mr. Bateman. *Maps.* *May* 19, 18
- — Soar navigation, act for. *Session*, 17
- — Stort navigation, acts for. *Sessions*, 1759 and 17
- — Stower navigation, act for appointing new Commissioners. *Session*, 18
- — Swale navigation, act for. *Session*, 17
- — Thames, acts relating to tolls and improvement of. *Sessions*, 1695 and 1777; and *July* 27, 18
- — bill for granting further powers. Tract. 8vo. vol. 64. *No place*, 17
- (MS. alterations and additions.)
- — Tone navigation, amended act. *July* 14, 18
- — Trent navigation, amendment act. *May* 9, 17
- — Ure navigation, act for. *June* 23, 18
- — Wear, bill for the construction of a dock on the south side of the. *Session*, 18
- — improvement, amended act. *June* 21, 18
- — Weaver navigation, amended act. *Aug.* 8, 18
- — Welland outfall, &c., improvement act, *May* 23, 17

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*March 21, 1810; May 30, 1811; June 6, and 27, 1815; June 5, 27, and 28, 1820; May 28, 1821; and Feb. 10, 1830*
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*June 3, July 3 and 7, 1817*
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*Lond. 1820*
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- — — Gloucester, improvement act. *Session, 1785*
- — — Kent, improvement acts. *Sessions, 1768 and 1789*
- — — Lancaster, improvement acts.  
*Session, 1784; and May 19, 1795*
- — — Middlesex, improvement act. *Session, 1789*
- — — Oxford, improvement act. *Session, 1784*
- — — Stafford, improvement acts.  
*Session, 1769; and March 23, 1807*
- — — Surrey, improvement act. *Session, 1780*
- — — Sussex, improvement act. *Session, 1770*
- — — London and Bangor by Shrewsbury, report of the Commissioners for repairing the.  
*June 11, 1816*
- — — Holyhead, returns of money expended on. *May 3, 1830*
- — — — reports of Commissions on.  
*June 11, 1816; March 2, April 8, 29, and July 6, 1819; May 30, 1827; June, 5, 1829; July 13, 1830; and June 27, 1835*
- — — Rochdale to Edenfield, improvement act. *April 4, 1794*
- — — Shrewsbury and Bangor Ferry, reports.  
*June 5, 1820; and Session, 1821*
- — — Spalding high bridge to Donnington, improvement act. *Session, 1764*
- — — Tavistock to Plymouth, act for enlarged powers, &c. *Session, 1772*
- — — Whetstone and St. Alban's, report. *July 18, 1828*
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*July 18, 1814; June 28, 1815; and July 13, 1819*
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- — of Plymouth, improvement act. *May 21, 1811*
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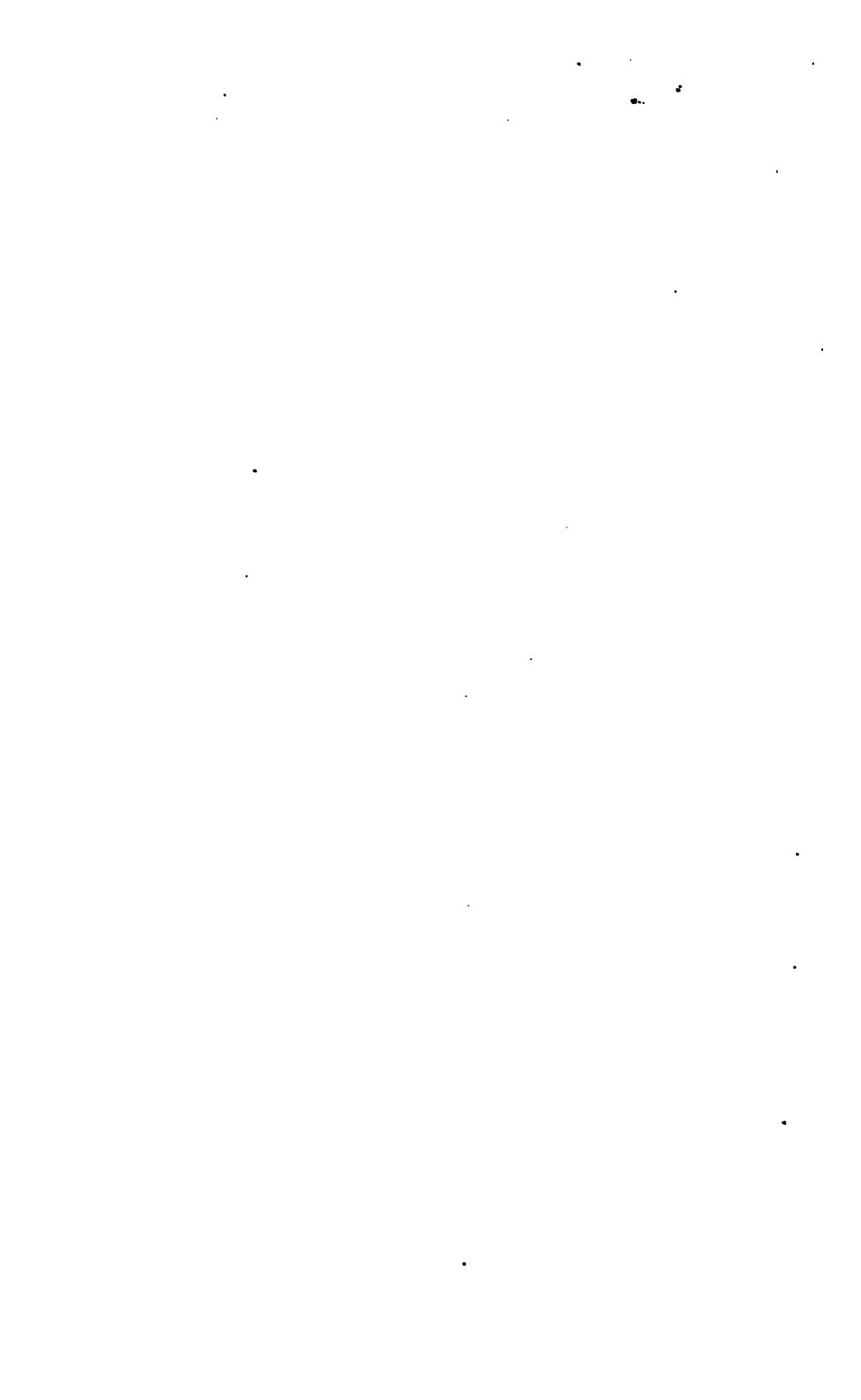
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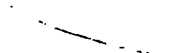
















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